

### **In the Specification:**

Page 1, beneath the title, insert the headings:

#### **Background of the Invention**

##### **1. Field of the Invention**

between lines 3 and 4, insert a heading:

##### **2. Description of the Prior art**

Page 2, replace the second paragraph, line 4, with a new paragraph as follows:

#### **-- Summary of the Invention**

The object of the invention is achieved ~~with features of claim 1~~ by providing a laboratory centrifuge with a rotor driven by a centrifuge electric motor, and a cooling unit driven by an electrical cooling motor, with the centrifuge motor being formed as a frequency-controlled induction motor fed from a frequency converter controlled by a control unit and having a centrifuge rectifier that feeds the centrifuge motor and is connected to a d.c. source fed from a mains power rectifier, with the cooling motor being formed as a frequency-controlled induction motor, and with the frequency converter for feeding the cooling motor having a further cooling inverted rectifier connected in parallel with the centrifuge inverted rectifier to the d.c. source. --.

Pages 2-3, replace the paragraph bridging these pages (page 2, last two lines, page 3, lines 1-4) with a new paragraph as follows:

-- The control unit, which controls the frequency converter, can control both inverted rectifiers with the same frequency. The drawback of this consists in that both the rotational speed and the cooling power are increased and decreased together. Therefore, advantageously, ~~the features of claim 2 are provided.~~ control unit controls the two inverted rectifiers independently from each other ~~provided.~~ These features make it possible to separately control, as needed, the rotational speed and the cooling power. --.

Pages 3-4, replace the paragraph bridging these pages (page 2, lines 5-17, page 4, lines 1-9) with a new paragraph as follows:

-- With centrifuges, it is necessary to bring the rotor to a stop as soon as possible after a centrifuge process ends in order to be able to remove centrifuged samples in short time. When the control frequency for the centrifuge inverter rectifier decreases, it supplies a high braking current in a d.c. source so that its voltage can reach an impermissible high value. According to the state of the art, the returned brake power is consumed, if required, in connectable

brake resistances which increases the construction costs.

Therefore, advantageously, ~~the features of claim 3 are provided~~ the control unit controls the two inverted rectifiers with a predetermined reduction of frequency if the frequency of the centrifuge inverted rectifier is reduced. In this way, during braking of the centrifuge motor, the returned brake power, at least partially is converted into current consumed from the d.c. source by the cooling motor that functions as a brake resistance. Therefore, the number of additional brake resistances can be substantially reduced or be completely eliminated, whereby the costs of a centrifuge is further reduced. A complete separate control of the driving powers of the centrifuge motor and the cooling motor can lead to a simultaneous full load in each of the two motors, and both the d.c. source and the mains power rectifier must be designed for this case. Therefore, advantageously, ~~the features of claim 4 are provided~~ the control unit reduces the frequency of the cooling inverted rectifier during acceleration of the centrifuge motor. Such control connection of both motors ensures that both accelerations of the rotor when the centrifuge motor requires a lot of power, the

cooling motor is driven with less power. As a result, the maximal power to-be-fed from the d.c. source is reduced, so the components can be reduced, which again can reduce the cost of the centrifuge. -

Page 4, replace the second paragraph lines 10-14, with a new paragraph as follows:

- - Advantageously, the control unit turns off the cooling inverted rectifier below a minimal frequency~~the features of claim 5 are provided~~. In this way it is insured that the cooling motor runs at a speed below the minimal rotational speed only for a short time. This is an advantage when conventional cooling units with a compressor are used for lubrication reasons, should operate above a minimal rotational speed. - -;

replace the last paragraph with a new paragraph as follows:

-- Brief Description of the Drawings:

Detailed Description of the Preferred Embodiment --.

The single drawing shows, by way of example and schematically, a very simplified block-diagram of a centrifuge according to the present invention. --.